

Listing of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1: (Currently Amended) A method of generating a Service Ticket for a requested Service comprising:

receiving by a granting service of a computing device, the computing device being different and distinct from a client, a request for a Service Ticket from ~~a-the~~ client;

generating by the granting service a session key;

encrypting by the granting service a cipher text with the session key

determining by the granting service a number of servers designated to provide the requested service;

for each providing server, encrypting by the granting service the session key with a secret key associated with each respective server;

creating by the granting service a Service Ticket that includes an encrypted session key for each providing server, and the encrypted cipher text; and

transmitting by the granting service the Service Ticket to the client.

2: (Currently Amended) The method of claim 1, further including:

the granting service generating a Ticket-Granting-Ticketing utilizing a protocol substantially in compliance with the Kerberos protocol; and

wherein receiving by the granting service a request for a Service Ticket from a client further includes the granting service receiving the Ticket-Granting-Ticket from the client.

3: (Currently Amended) The method of claim 1, wherein the granting service determining the number of servers designated to provide the requested service includes:

the granting service utilizing a database that maps a generic server name to a specific server name; and

the granting service setting the numbers of servers designated to provide the service equal to the number of specific server names mapped to the generic server name that provides the requested service.

4: (Currently Amended) The method of claim 3, wherein the granting service utilizing a database that maps a generic server name to a specific server name includes the granting service selecting a database from a group consisting essentially of:

- a domain name server database,
- a database associated with a Key Distribution Center, and
- a Kerberos database.

5: (Original) The method of claim 3, wherein the secret keys associated with each providing server are not synchronized across the providing servers.

6: (Original) The method of claim 1, wherein the created Service Ticket includes:

a header that designates the Service Ticket as a format that includes multiple encrypted session keys,

a field that expressly designates the number of encrypted session keys,
an encrypted session key for each providing server, and
the encrypted cipher text.

7: (Currently Amended) The method of claim 1, further including:

| the granting service determining if the requested service is provided by a
plurality of servers:

| if not, the granting service generating the Service Ticket utilizing a single
server mode; and

| if so, the granting service generating the Service Ticket as described in
claim 1.

| 8: (Currently Amended) The method of claim 7, wherein the granting service
generating the Service Ticket utilizing a single server mode includes:

| the granting service generating a cipher text;

| the granting service encrypting the cipher text with a secret key associated
with the providing server; and

| the granting service transmitting the Service Ticket, that includes the
encrypted cipher text, to the client.

9: (Currently Amended) A method of authenticating a client's request for a
service provided by a service pool comprising:

| a server receiving a Service Ticket, the client having at least one
encrypted session key, and an encrypted cipher text, the client sending service

tickets to multiple servers, including the server, to establish multiple connections;
the receiving server decrypting the encrypted session key associated with
the receiving server utilizing a secret key associated with the receiving server;
the receiving server decrypting the cipher text utilizing the decrypted
session key; and
the receiving server providing the service to the client.

10: (Currently Amended) The method of claim 9, wherein the receiving server
receiving a Service Ticket is part of a series of client transactions substantially in
compliance with the Kerberos protocol.

11: (Currently Amended) The method of claim 9, wherein the receiving server
decrypting the encrypted session key includes:
the receiving server determining the number of encrypted session keys
included within the received Service Ticket;
for each encrypted session key, the receiving server decrypting the
encrypted session key utilizing a secret key associated with the receiving server;
and
wherein the receiving server decrypting the cipher text utilizing the decrypted
session key includes
for each encrypted session key, the receiving server attempting to decrypt
the cipher text with the decrypted session key;
if the cipher text is successfully decrypted, the receiving server providing
the service to the client.

12: (Currently Amended) The method of claim 9, wherein the receiving server decrypting the encrypted session key associated with the receiving server utilizing a secret key associated with the receiving server includes:

the receiving server utilizing a server identifier to determine which encrypted session key is associated with the receiving server; and

the receiving server decrypting the associated encrypted session key utilizing a secret key associated with the receiving server.

13: (Currently Amended) The method of claim 9, further including:

the receiving server determining if the received Service Ticket includes a plurality of encrypted session keys for multiple servers

if not, the receiving server processing the ticket in a single server mode;
and

if so, the receiving server processing the ticket as described in claim 9.

14. (Currently Amended) The method of claim 13, wherein the receiving server processing the ticket in a single server mode includes the receiving server processing the Service Ticket in utilizing a process substantially compliant with the Kerberos protocol.

15. (Currently Amended) The method of claim 9, wherein the receiving server receiving a Service Ticket includes:

a managing agent first receiving a Service Ticket;

the managing agent selecting the a receiving server from a server pool

having a plurality of servers;
routing the Service Ticket to the receiving server.

16. (Currently Amended) The method of claim 15, wherein the plurality of servers each includes a secret key associated with the respective servers, and the plurality of secret keys are not synchronized among the plurality of servers..

17. (Original) The method of claim 16, wherein the server pool functions as a group of independent computers working together as a single system.

18 - 33. (Canceled)

34: (Currently Amended) An article comprising:
a storage medium having a plurality of machine accessible instructions, wherein when the instructions are executed by a computing device, the instructions provide for:

receiving by a granting service of the computing device, the computing device being different and distinct from a client, a request for a Service Ticket from a the client;

generating by the granting service a session key;

encrypting by the granting service a cipher text with the session key

determining by the granting service the number of servers designated to provide the requested service;

for each providing server, encrypting by the granting service the session

key with a secret key associated with each respective server;

creating by the granting service a Service Ticket that includes an encrypted session key for each providing server, and the encrypted cipher text; and

transmitting by the granting service the Service Ticket to the client.

35: (Currently Amended) The article of claim 34, further including instructions providing for:

the granting service generating a Ticket-Granting-Ticketing utilizing a protocol substantially in compliance with the Kerberos protocol; and

wherein receiving by the granting service a request for a Service Ticket from a client further includes receiving by the granting service the Ticket-Granting-Ticket from the client.

36: (Currently Amended) The article of claim 34, wherein the instructions providing for the granting service determining the number of servers designated to provide the requested service includes instructions providing for:

the granting service utilizing a database that maps a generic server name to a specific server name; and

the granting service setting the numbers of servers designated to provide the service equal to the number of specific server names mapped to the generic server name that provides the requested service.

37: (Currently Amended) The article of claim 36, wherein the instructions providing for the granting service utilizing a database that maps a generic server name to a specific server name includes instructions providing for the granting service selecting a database from a group consisting essentially of:

- a domain name server database,
- a database associated with a Key Distribution Center, and
- a Kerberos database.

38: (Original) The article of claim 36, wherein the secret keys associated with each providing server are not synchronized across the providing servers.

39: (Currently Amended) The article of claim 38, wherein the instructions providing for the granting service creating a Service Ticket further includes instructions providing for creating by the granting service a Service Ticket that includes:

- a header that designates the Service Ticket as a format that includes multiple encrypted session keys,
- a field that expressly designates the number of encrypted session keys,
- an encrypted session key for each providing server, and
- the encrypted cipher text.

40: (Currently Amended) The article of claim 34, further including instructions providing for:

- the granting service determining if the requested service is provided by a

plurality of servers:

if not, generating by the granting service the Service Ticket utilizing a single server mode; and

if so, generating by the granting service the Service Ticket as described in claim 1.

41: (Currently Amended) The article of claim 40, wherein the instructions providing for the granting service generating the Service Ticket utilizing a single server mode includes instructions providing for:

the granting service generating a cipher text;

the granting service encrypting the cipher text with a secret key associated with the providing server; and

the granting service transmitting the Service Ticket, that includes the encrypted cipher text, to the client.

42: (Currently Amended) An article comprising:

a storage medium having a plurality of machine accessible instructions, wherein when the instructions are executed by a server, the instructions provide for:

the a server receiving a Service Ticket, from the client having at least one encrypted session key, and an encrypted cipher text, the client sending service tickets to multiple servers, including the server, to establish multiple connections;

the server decrypting the encrypted session key associated with the receiving server utilizing a secret key associated with the receiving server;

the server decrypting the cipher text utilizing the decrypted session key;

and

the providing the service to the client.

43: (Currently Amended) The article of claim 42, wherein the instructions provide for the server receiving a Service Ticket are part of a series of client transactions substantially in compliance with the Kerberos protocol.

44: (Currently Amended) The article of claim 42, wherein the instructions provide for the server decrypting the encrypted session key includes instructions provide for:

the server determining the number of encrypted session keys included within the received Service Ticket;

for each encrypted session key, the server decrypting the encrypted session key utilizing a secret key associated with the receiving server; and wherein decrypting the cipher text utilizing the decrypted session key includes

for each encrypted session key, the server attempting to decrypt the cipher text with the decrypted session key;

if the cipher text is successfully decrypted, the server providing the service to the client.

45: (Currently Amended) The article of claim 42, wherein the instructions provide for the server decrypting the encrypted session key associated with the receiving server utilizing a secret key associated with the receiving server includes instructions provide for:

the server utilizing a server identifier to determine which encrypted session key is associated with the receiving server; and
the server decrypting the associated encrypted session key utilizing a secret key associated with the receiving server.

46: (Currently Amended) The article of claim 42, further including instructions provide for:

the server determining if the received Service Ticket includes a plurality of encrypted session keys for multiple servers
if not, the server processing the ticket in a single server mode; and
if so, the server processing the ticket as described in claim 9.

47. (Currently Amended) The article of claim 46, wherein the instructions provide for the server processing the ticket in a single server mode includes instructions provide for the server processing the Service Ticket in utilizing a process substantially compliant with the Kerberos protocol.

48. (Currently Amended) The article of claim 42, wherein the instructions provide for the server receiving a Service Ticket includes instructions provide for:
a managing agent first receiving a Service Ticket;
the managing agent selecting a ~~receiving~~ the server from a server pool having a plurality of servers;
routing the Service Ticket to the ~~receiving~~ server.

49. (Currently Amended) The article of claim 48, wherein the plurality of servers each includes a secret key associated with the respective servers, and the plurality of secret keys are not synchronized among the plurality of servers..

50. (Original) The article of claim 49, wherein the server pool functions as a group of independent computers working together as a single system.